

Regulated contaminants are divided into six categories: Bacteria/Viruses, Nitrate/Nitrites, Inorganic and Heavy Metals, Volatile Organics, Synthetic Organics, and Other Organics. This fact sheet reviews only Inorganic, Heavy Metals and Nitrates/Nitrites. For complete results of regulated contaminant sampling please refer to the public water systems' Source Water Assessment or visit Drinking Water Watch on the web:

<http://map.dec.state.ak.us/eh/dww/index.jsp>

Public water systems located in the basin are identified by their Public Water System Identification Number (PWSID) and are listed below.

PWSID

211952	241062	244264	248925
240757	241101	247474	249086
240773	243420	247610	249379
240781	244159	248381	291952

LAND USE ACTIVITIES

ADEC has identified the following land use activities in the area that have a potential to impact water quality: landfills, wastewater treatment plants, sewer lines, septic systems, above and below ground fuel storage, airports, boatyards/marinas, cemeteries, seafood processing, electric power generation, firehouses, gasoline stations, Class V Injection Wells, laundromats, medical facilities, motor vehicle repair shops, petroleum storage, ADEC Contaminated Sites (CS), Leaking Underground Storage Tanks (LUST) and Underground Storage Tanks (UST).

ADEC regulated sites within the Basin are:
Contaminated Sites (CS):

Active: 31

Closed: 14

Conditional Closure: 5

LUST: 21

UST: 74

Details on CS, LUST and UST sites identified in this Basin can be obtained from:

http://www.dec.state.ak.us/spar/csp/db_search.htm

PROTECTION EFFORTS

Currently wellhead protection plans have not been established for public water systems in the Basin. Protection efforts should include implementing a wellhead protection plan, and identifying and managing improperly abandoned wells or other features that may provide direct pathways for contamination to enter the aquifer. ADEC has created a CD ROM to assist communities in developing a wellhead protection plan. Applications for the CD are available at:

http://www.dec.state.ak.us/eh/dw/DWP/source_water.html



Alaska's Drinking Water Protection Program

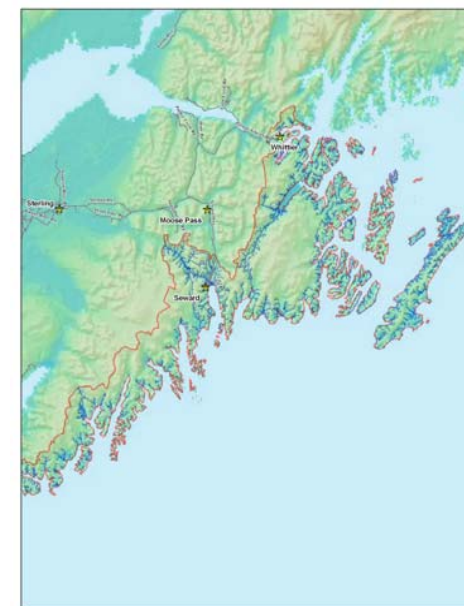
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Anchorage, Alaska 99501
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BASIN FACT SHEET FOR WESTERN PRINCE WILLIAM SOUND

USGS HUC: 19020202

**ALASKA DEPARTMENT OF
ENVIRONMENTAL
CONSERVATION**

**DRINKING WATER
PROTECTION**



BASIN OVERVIEW

AREA DESCRIPTION

The Western Prince William Sound basin is contained by the Kenai Mountains in the west, Chugach Mountains to the north and the Gulf of Alaska to the southeast. The basin is sparsely populated. The three main population area are: City of Seward, City of Whittier and the Village of Chenega.

AREA GEOLOGY

The surface geology of the Seward area is predominantly composed of unconsolidated surficial deposits. These deposits are chiefly of glaciofluvial origin. This alluvium comprises an unconfined aquifer. The exposed rock surrounding Seward is predominantly the Jurassic or Cretaceous Valdez Group. The Valdez Group is comprised of weakly metamorphosed metagraywacke, metasiltstone, and argillite

The subsurface composition near Whittier consists primarily of slate and graywacke (a tight, non-porous, dark-colored sandstone containing angular grains and fragments of other rocks), locally overlain by unconsolidated Quaternary deposits consisting of glacial moraine, reworked outwash and stream gravel, and artificial fill in the developed area.

PUBLIC DRINKING WATER USAGE

The basin has 16 public drinking water systems consisting of 25 separate sources. These sources serve a total population of 6,862. The estimated annual usage of water from these systems is estimated to be 292,773,800 gallons per year (802,120 gallons per day).

All 25 sources are ground water. Of the public water systems, 14 are community water systems and 11 are classified as transient/non-community.

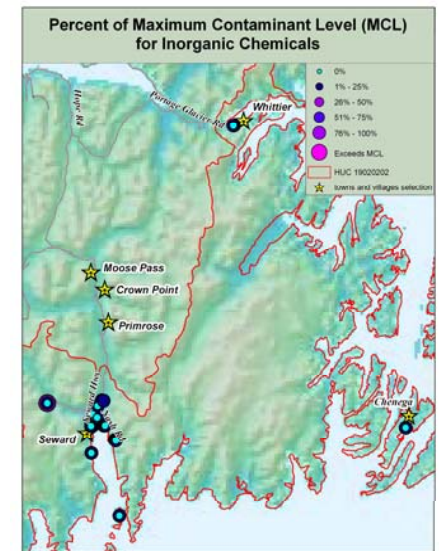
WATER QUALITY

The Alaska Department of Environmental Conservation (ADEC) has prepared Source Water Assessments reports for all public drinking water systems in the basin. Source Water Assessments provide a detailed description of each Public Water System in the Basin. The results of the assessments can be reviewed at:

<http://www.dec.state.ak.us/eh/dw/DWP/complete.aspx>

Naturally occurring levels of contaminants exist in all drinking water sources. Inorganic chemicals are the most likely contaminants to occur naturally. Low level concentrations of the following inorganic chemicals have been detected in public drinking water systems in the Basin: thallium, selenium, nitrate, fluoride, beryllium and arsenic.

All public drinking water systems within the Basin are below the Maximum Contaminant Levels (MCL) for all regulated inorganic contaminants. The MCL is the maximum level of contaminant allowed to exist in drinking water and still be consumed without harmful effects.



* Inorganic Chemicals reviewed: antimony, arsenic, nitrates/nitrites, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium and thallium.